AF| 2174 ₩

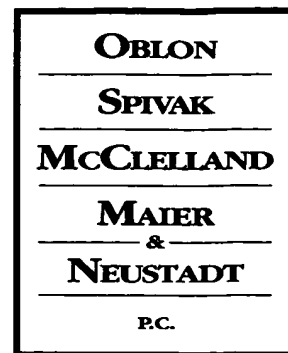Docket No.: 5244-0099-2X

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RE: Application Serial No.: 09/393,677
    Applicants: Tetsuro MOTOYAMA, et al.
    Filing Date: September 10, 1999
    For: REMOTE SYSTEM USAGE MONITORING WITH
        FLEXIBLE OBJECT
    Group Art Unit: 2174
    Examiner: Nguyen, N.

SIR:

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Technology Center 2100

Attached hereto for filing are the following papers:

APPEAL BRIEF (IN TRIPLICATE)

Our credit card payment form in the amount of **$330.00** is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
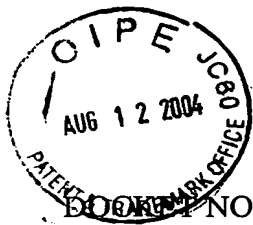
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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF   :

TETSURO MOTOYAMA ET AL. : EXAMINER: NGUYEN, N.

SERIAL NO: 09/393,677   :

FILED: SEPTEMBER 10, 1999   : GROUP ART UNIT: 2174

FOR: REMOTE SYSTEM USAGE :
MONITORING WITH FLEXIBLE
OBJECT

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants appeal the rejection in the Office Action of April 7, 2004.

I. REAL PARTY IN INTEREST

The present application is assigned to Ricoh Company, Ltd., having a place of

business at 3-6 Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, and that

party is the real party in interest in the present appeal.

II. RELATED APPEALS AND INTERFERENCES

Appellant, appellants' legal representatives, and the assignee note the present

Appeal is related to the Appeal in co-pending U.S. application serial No. 09/440,692,

by virtue of that Appeal and the present Appeal having similar issues and similar

rejections over the same applied art.

III. <u>STATUS OF CLAIMS</u>

Claims 1, 3-9, 11-17, 19-25, and 27-32 are pending in this application, and

each of claims 1, 3-9, 11-17, 19-25, and 27-32 is on appeal. Claims 2, 10, 18, and 26

were canceled during prosecution.

IV. <u>STATUS OF AMENDMENTS</u>

No amendment is outstanding and all previously submitted amendments have

been entered.

V. <u>SUMMARY OF THE INVENTION</u>

The claimed invention is directed to a system, a method, and a computer

program product that all operate to monitor usage of an interface of a device, the

interface including a plurality of operations to be selected by a user, and that then

send a log of monitored usage data to a destination.

More particularly, in the claimed invention, and with reference to Figures 9-11

in the present specification as a non-limiting example, a device 300 includes a user

interface 510. Figures 10 and 11 show specific embodiments of user interfaces 600,

700, the embodiment of Figure 10 showing a monitor 600 of a workstation as a user

interface and the embodiment of Figure 11 showing an operation panel 700 of an

image forming device as a user interface. (See also the present specification at page

17, line 25, to page 19, line 2).

Further, in the claimed invention a monitoring is executed to monitor data of

selecting of the plurality of operations of the interface by the user, and to generate a

log of the monitored data in the device. (See for example the monitoring block 1200

in Figures 12A, 12B, which includes a logging operation 1315, and the corresponding

discussion in the present specification at page 19, line 26 et. seq.). The log of the

monitored data is in the form of an abstract class. (See for example the specification

at page 29, line 9 et. seq.).

Further, a communicating device receives an object derived from the abstract

class including the log of the monitored data. (See for example the sending block

1600 in Figures 12A, 12B and also Figure 17 in the present specification).

Further, the monitoring device automatically starts the monitoring without

requiring a connection to a receiving device to which the log of monitored data is to

be sent. (See for example the present specification at page 20, line 21 et. seq., and

particularly page 20, lines 22-23 that state that Figure 13 shows that when a target

application of a device starts up a startMonitoring function is called. As evident from

that discussion in the present specification and from Figure 13 no connection to a

receiving device to which the log of the monitored data is to be sent is needed to

begin the monitoring operation).

Further, the communicating device automatically communicates the log of the

monitored data by a unidirectional communication without requiring input from the

device to which the message of the monitored data is to be sent. (That subject matter

is evident from Figure 17 in the present specification showing the operation of the

sending block 1600 and the corresponding description thereof in the present

specification at page 26, line 24 et. seq. At that portion it is clear that the message of

the log of the monitored data is sent without requiring an input from the device to

which the log of the monitored data is to be sent).

VI. ISSUES

The only issue outstanding in the above-identified application is whether each

feature recited in claims 1, 3-9, 11-17, 19-25, and 27-32 is fully met by the teachings

in U.S. patent 6,018,619 to Allard et al. (herein "Allard").

VII. GROUPING OF CLAIMS

Each of claims 1, 9, 17, and 25 are grouped together and thereby stand and fall

together. That group includes independent claims 1, 9, 17, and 25.

Dependent claims 3, 11, 19, and 27 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are grouped separately.

Dependent claims 4, 12, 20, and 28 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 5, 13, 21, and 29 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 6, 14, 22, and 30 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 7, 15, 23, and 31 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 8, 16, 24, and 32 are believed to recite further limitations

distinguishing over the applied art to Allard, and thus are also grouped separately.

VIII. ARGUMENT

As noted above the only issue pending in the outstanding Office Action is

whether each element positively recited in claims 1, 3-9, 11-17, 19-25, and 27-32 is

fully met by the teachings in Allard. Applicants respectfully submit that each of the claims positively recites features neither taught nor suggested by Allard.

Independent Claims 1, 9, 17, 25

The above-noted claims positively recite several features neither taught nor suggested by Allard.

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, requires "a device comprising an interface, the interface comprising a plurality of operations to be selected by a user".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, also requires either a monitoring device or a monitoring operation to "automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, also requires either a communication device or a communication operation to "automatically communicate the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent"

Such features positively recited in the claims set forth an operation and structure that clearly differs from the teachings in Allard.

The claims as currently written are directed to a system, method, or computer program product that include a device comprising an interface with a plurality of options to be selected by a user. The user's selection of those pluralities of options is monitored, generated into a log, and stored, without an input from or connection to a device that ultimately will receive the log. A communicating device receives an

object derived from the abstract class including the log of the monitored data, and

communicates that message of the monitored data by a unidirectional communication

without requiring input from a device to which the message of the log of the

monitored data is to be sent. That is, in the claimed invention the destination device

to which the log of the monitored data is to be sent does not need to establish a prior

connection to the communicating device, nor does that destination device need to

provide any instructions for authorization of the monitoring, generating, storing, or

communicating operations.

Allard is directed to a method for tracking usage patterns of users of hyper-

media systems such as on the World-Wide-Web (WWW). In order for the system of

Allard to properly operate, a client system server (i.e. the destination device to which

the tracked data is to be sent) must be connected at the time of an initial session

beginning. That operation is evident for example in Figure 3 of Allard in which step

54 monitors a session beginning event, and when a session beginning event is

detected, contact with a server is initiated in step 60. Then in step 64 the server (i.e.

the destination device) must make an acknowledgment. Thus, in Allard before any

monitoring operation can be executed, contact with a server must be initiated, and a

server acknowledgment, i.e., an input from the destination device server, is then

required. From such an operation it is clear that Allard requires a client system

connected to a server destination device through a bi-directional communication

connection and with a required input from the server destination device to even begin

the monitoring operation.

First, applicants note that the claimed invention appears to differ from a

fundamental basis from the device in Allard. In Allard the application program

running on the client machine is a browser. Given that the browser is the application

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program, the only possible interaction between the user and the browser is on the

menu of the browser, for example the controls such as "File", "Edit", "View",

"Favorites", "Tools", and "View" on a browser such as MicroSoft's Internet Explorer.

In Allard there is no method described to monitor the interaction of a user with such a

browser. In such ways, Allard differs from the claims in a basic manner.

Moreover, applicants submit that the outstanding rejection is improper in that

it does not even clearly set forth what elements in Allard are being applied against the

claim features. The claims recite specific structures and operations and the

outstanding rejection does not specifically correspond any element in Allard to the

corresponding structures and operations.

For example, with respect to the claim 1 limitation to the "device comprising

an interface of a target application, the interface comprising a plurality of operations

to be selected by a user", the outstanding rejection in the April 7, 2004 Office Action

cites Allard at column 8, lines 46-48 and column 11, lines 6-10.[1] In that respect it is

unclear what element in Allard is being cited to correspond to the claimed "device".

At column 8, lines 46-48 Allard provides a broad definition of a "client

system" and at column 11, lines 6-10 Allard discloses a user operating a client

software. However, how such teachings are being applied to the claimed "device" is

unclear.

In Allard if the claimed "device" is met by a "client computer", no indication

is provided whatsoever as to what the "interface" on the client computer is, or how it

is monitored, or how the results thereof are stored in the same device.

Figure 1 of Allard shows several clients 20 and a client 16. It is clear,

however, from Figure 2 in Allard that none of those clients 16, 20 has monitoring

---

[1] Office Action of April 7, 2004, page 2, third paragraph of prenumbered point 4.

software stored therein, and it is evident from Figure 2 in Allard that separate tracking

clients, e.g. 28, are needed for a monitoring operation. The claims expressly require

the log of the monitored data being stored in the *same device including the interface*.

It is clear that none of the clients 16, 20 in Allard has a log of the monitored data

stored therein as the tracking or monitoring is done by a completely separate device.

The outstanding rejection never fully addresses which specific elements in

Allard are being cited to correspond to the claimed features, but only broadly

references different disclosures in Allard as meeting the claim limitations in an

inconsistent manner.

Applicants again note that in the claims the device that includes the interface

has the log of the monitored data stored therein, which is clearly not the case in Allard.

With respect to the "monitoring unit" of claim 1 the April 7, 2004 Office

Action cites the teachings in Allard at column 11, lines 6-10, column 9, lines 7-9, and

column 9, lines 58-59.[2] In response to that position applicants note that such

teachings in Allard are just broad generalizations directed to being able to collect or

log data at a server, and particularly at a tracking client 28. In that respect applicants

again note the claims require that the monitored data is stored in a log "in the device",

the device again including the interface being monitored. The noted reference to the

tracking client 28 in Allard at column 9, lines 58-59 appears to be cited to correspond

to the claimed "monitoring unit". However, such a basis for the outstanding rejection

is clearly improper as the tracking client 28 in Allard does not include any type of

"interface comprising a plurality of operations to be selected by a user".

---

[2] Office Action of April 7, 2004, page 2, third paragraph of prenumbered point 2.

With respect to the claimed "communicating device", the April 7, 2004 Office Action cites the teachings in <u>Allard</u> at column 9, lines 7-9 and 60-64.[3] In that respect at column 9, lines 7-9 and 60-64, <u>Allard</u> discloses the tracking client 28 being connected to a CST information server 22, but such teachings do not appear even related to the claimed "communicating device".

Similarly, with respect to the claimed features of the "monitoring device... to automatically start the monitoring without requiring a connection to a receiving device to which the log of the monitored data is to be sent", and the "communicating device ... to automatically communicate the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent", the cited teachings in <u>Allard</u> are unclear as to what actual elements are being relied upon to meet the claim limitations.

Applicants respectfully submit that failure to properly set forth how the teachings and specific elements in <u>Allard</u> are being applied against the claims renders the outstanding rejection under 35 U.S.C. §102(e) clearly improper. For such a basis alone, the outstanding rejections based on <u>Allard</u> must be REVERSED.

Moreover, applicants submit that the teachings in <u>Allard</u> cannot be properly applied against the claim limitations because <u>Allard</u> simply does not teach a device even similar to the claimed features.

<u>Allard</u> does disclose devices being monitored, specifically clients 16 and 20, for example in Figure 1 therein. However, in <u>Allard</u> those clients 16 and 20 do not themselves store any log of monitored data. Instead, in <u>Allard</u> the log of the monitored data is stored in a tracking client such as usage log 38, 40, see for example Figure 2, which is part of a server system that the clients 16 and 20 log into.

---

[3] Office Action of April 7, 2004, page 3, fourth paragraph of prenumbered point 4.

Such differences between the claimed invention and the device in <u>Allard</u> result from the claimed invention and the device of <u>Allard</u> having fundamentally different objectives.

One objective of the claimed device is to provide a simple system that can monitor a user's usage of an interface of a device itself, such as an image forming device. In contrast, <u>Allard</u> is only directed to how different websites are utilized by a user. In <u>Allard</u> a user's usage of the actual client 16, 20 is not relevant, but only how the user utilizes a website is relevant in <u>Allard</u>.

Stated another way, the claimed invention is directed to monitoring how a user uses an interface on a device such as an image forming apparatus. <u>Allard</u> teaches no such features. For <u>Allard</u> to teach such features, <u>Allard</u> would have to be concerned with how the interfaces on the clients 16, 20 were utilized. <u>Allard</u> is not concerned with such features but is only concerned with how a user of the clients 16, 20 searches utilizing the world wide web (www). In such ways, <u>Allard</u> clearly does not teach or suggest the claimed features of the device including an interface being monitored also operating to store a log of the monitored data in that same device, as required in each of the independent claims.

The noted claims also differ from the teachings in <u>Allard</u> as in the claims as currently written there is no bi-directional communication required, i.e. no input is needed from a destination server, to begin the monitoring operation or to communicate the message of the monitored data. That is, in the noted claims the monitoring starting and the communication of the message of the monitored data does not require input from a device to which the message of the monitored data is to be communicated, and thus only a unidirectional communication is needed for those

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operations in the claims as currently written, in direct contrast to the disclosure in

Allard.

In maintaining the outstanding rejection based on Allard the Office Action of

April 7, 2004 states:

> (a) By monitoring usage patterns of users of selecting
> different graphical user interfaces on the Web pages
> (abstract and col. 9, lines 7-64), Allard does teach a
> monitoring unit configured to monitor selecting data of
> the plurality of operations of the interface by the user as
> cited by the claimed language.
>
> (b) Allard's col. 9, lines 57-64 does teach "a client 28 is
> able to do client side usage tracking by keeping a
> session usage log on disk 30 or RAM, local to the
> tracking client computer".
>
> (c) There is, in fact, no input needed from a destination
> server to begin the monitoring operation or to
> communicate the message of the monitored data in
> Allard's system. According to Allard, the client 28
> automatically monitors usage patterns of users and
> transmits the log usage from local disk 30 to the CST
> server 22 without requiring any input from the CST
> server 22 (col. 9, lines 56-64).

The above-noted positions for maintaining the outstanding rejection are all

flawed because Allard simply does not teach or suggest that the device including the

interface which is monitored stores a log of the monitored data. The client 28 in

Allard is clearly not the device including an interface being monitored.

Applicants also note that Allard requires a connection to a monitoring device

to begin the monitoring and to communicate the log of the monitored data, again in

contrast to the claims. In fact, applicants also note that even at column 9, lines 56-64

Allard requires the client 28 to have a connection with the CST information server 22

for monitoring, which is clear from Allard stating that the tracking client 28 "must

end" the session with the CST information server 22, clearly indicating that the client

28 must have first begun the session with the CST information server 22 to begin the

monitoring. Thus, even the flawed basis for the rejection is improper as it requires a connection between the client 28 and the CST server 22 to begin the monitoring and the communication, which is again in contrast to the claims.

In view of the foregoing comments, applicants respectfully submit that clearly the positively recited features in the claims distinguish over the teachings in Allard.

Thereby, it is clear that each of independent claims 1, 9, 17, and 25, and the claims dependent therefrom, distinguish over the teachings in Allard.

The Dependent Claims

Moreover, the dependent claims recite further features neither taught nor suggested by Allard in contrast to the positions stated in the April 7, 2004 Office Action.

Dependent Claims 3, 11, 19, 27

Dependent claims 3, 11, 19, and 27 further recite that the "device is an image forming device and the interface is an operation panel of the image forming device". The portion in Allard noted to meet that claim limitation is at column 8, lines 46-48, and column 11, lines 6-10.[4] Clearly no teachings in Allard at those portions even address such claimed features as that portion in Allard does not even reference an "image forming device".

---

[4] Office Action of April 7, 2004, page 3.

Dependent Claims 4, 12, 20, 28

Dependent claims 4, 12, 20, and 28 further recite "the device is an appliance and the interface is an operation panel of the appliance". Again Allard is cited at column 8, lines 46-48, and column 11, lines 6-10, to meet such limitations,[5] but clearly no portions of Allard therein meet those features.

Dependent Claims 5, 13, 21, 29

Dependent claims 5, 13, 21, and 29 further recite "the communicating device sends the log of the monitored data when the user exits the target application". That feature also distinguishes over Allard. The Office Action cites Allard at column 9, lines 60-64, to meet that claim limitation.[6] However, Allard at that noted portion simply does not disclose any even similar subject matter as that portion in Allard does not address the *user* exiting the session.

Dependent Claims 6, 14, 22, 30

Dependent claims 6, 14, 22, and 30 further recite "a setting unit configured to set a number of sessions of the device to be executed by the user prior to the communicating device communicating the log file of the monitored data".

The outstanding Office Action cites the teachings in Allard at column 14, lines 15-23, to meet such claim limitations.[7] However, that portion in Allard does not even address setting a number of sessions of the user utilizing the device.

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[5] Office Action of April 7, 2004, page 3.
[6] Office Action of April 7, 2004, page 3.
[7] Office Action of April 7, 2004, page 3.

<u>Dependent Claims 7, 15, 23, 31</u>

Dependent claims 7, 15, 23, and 31 further recite the "abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set num of sessions".

The outstanding Office Action cites <u>Allard</u> at column 14, lines 15-23, meeting such claim limitations.[8] However, <u>Allard</u> simply has no disclosure even similar to the claimed "abstract class" therein.

<u>Dependent Claims 8, 16, 24, 32</u>

Dependent claims 8, 16, 24, and 32 further recite that the "communicating device communicates the log of the monitored data by Internet mail". That feature further distinguishes over <u>Allard</u>.

With respect to the above-noted feature the outstanding Office Action states "it is inherent in Allard's system that the communicating unit communicated the log of the monitored data by Internet mail".[9]

That basis for the outstanding rejection is clearly improper.

There is no requirement whatsoever that <u>Allard</u> communicate the log of the monitored data by internet mail. Many types of communication are possible, for example any form of wired or wireless communication, communication through a facsimile line, etc. To state that internet mail is inherent is clearly not the case. Further, the grounds for the outstanding rejection has not indicated where support is provided for the position that <u>Allard</u> inherently utilizes internet mail or that even such a basis for an outstanding rejection is proper.
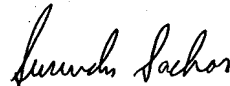
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[8] Office Action of April 7, 2004, page 4.
[9] Office Action of April 7, 2004, page 4.

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IX. CONCLUSION

For the foregoing reasons each of claims 1, 3-9, 11-17, 19-25, and 27-32

distinguishes over the teachings in <u>Allard</u>, and thereby the outstanding rejection must

be REVERSED.

Respectfully submitted,

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APPENDIX

1. A system comprising:

a device comprising an interface, the interface comprising a plurality of operations to be selected by a user;

a monitoring unit configured to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class;

a communicating unit configured to receive an object derived from the abstract class including the log of the monitored data, and to automatically communicate the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent.

2. (Canceled).

3. A system according to Claim 1, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

4. A system according to Claim 1, wherein the device is an appliance and the interface is an operation panel of the appliance.

5. A system according to Claim 1, wherein the communicating unit sends the log of the monitored data when the user exits the device.

6. A system according to Claim 1, further comprising a setting unit configured to set a number of sessions of the device to be executed by the user prior to the communicating unit communicating the log of the monitored data.

7. A system according to Claim 6, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

8. A system according to any one of Claims 1 and 3-7, wherein the communicating unit communicates the log of the monitored data by Internet mail.

9. A system comprising:

a device comprising interface means, the interface means for providing a plurality of operations to be selected by a user;

monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for generating a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class;

communicating means for receiving an object derived from the abstract class including the log of the monitored data, and for automatically communicating the log

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of the monitored data by a unidirectional communication without requiring input from

the device to which the log of the monitored data is to be sent.

10. (Canceled).

11. A system according to Claim 9, wherein the device is an image forming

device and the interface means is an operation panel of the image forming device.

12. A system according to Claim 9, wherein the device is an appliance and the

interface means is an operation panel of the appliance.

13. A system according to Claim 9, wherein the communicating means sends

the log of the monitored data when the user exits the target device.

14. A system according to Claim 9, further comprising a setting means for

setting a number of sessions of the device to be executed by the user prior to the

communicating means communicating the log of the monitored data.

15. A system according to Claim 14, wherein the abstract class includes first

and second derived classes, the first derived class storing data of one session and the

second derived class storing data of the set number of sessions.

16. A system according to any one of Claims 9 and 11-15, wherein the

communicating means communicates the log of the monitored data by Internet mail.

17. A method of monitoring usage of an interface of a device, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting of the plurality of operations of the interface by the user;

generating a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class; and

receiving an object derived from the abstract class including the log of the monitored data, and automatically communicating the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent.

18. (Canceled).

19. A method according to Claim 17, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

20. A method according to Claim 17, wherein the device is an appliance and the interface is an operation panel of the appliance.

21. A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the device.

22. A method according to Claim 17, further comprising a step of setting a number of sessions of the device to be executed by the user prior to the communicating device communicating the log of the monitored data.

23. A system according to Claim 22, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

24. A method according to any one of Claims 17 and 19-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

25. A computer program product comprising:

a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a device, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and configured to generate a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class; and

a second computer code device configured to receive an object derived from the abstract class including the log of the monitored data, and to automatically communicate the log of the monitored data by a unidirectional communication

without requiring input from the device to which the log of the monitored data is to be

sent.

26. (Canceled).

27. A computer program product according to Claim 25, wherein the device is

an image forming device and the interface is an operation panel of the image forming

device.

28. A computer program product according to Claim 25, wherein the device is

an appliance and the interface is an operation panel of the appliance.

29. A computer program product according to Claim 25, wherein the second

computer code device is further configured to send the log of the monitored data when

the user exits the device.

30. A computer program product according to Claim 25, further comprising a

third computer code device configured to set a number of sessions of the device to be

executed by the user prior to the second computer code device communicating the log

of the monitored data.

31. A computer program product according to Claim 30, wherein the abstract

class includes first and second derived classes, the first derived class storing data of

one session and the second derived class storing data of the set number of sessions.

32. A computer program product according to any one of Claims 25 and 27-

31, wherein the second computer code device is further configured to communicate

the log of the monitored data by Internet mail.